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### INSECTA MATSUMURANA

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# A REVISIONAL STUDY OF THE SPECIES OF THE GENUS ULOMA FROM JAPAN, KOREA AND TAIWAN (TENEBRIONIDAE, COLEOPTERA)

By Kimio Masumoto and Naomi Nishikawa

### Abstract

MASUMOTO, K. and NISHIKAWA, N. 1986. A revisional study of the species of the genus *Uloma* from Japan, Korea and Taiwan (Tenebrionidae, Coleoptera). *Ins. matsum.* n. s. 35: 17-43, 87 figs.

The genus *Uloma* from Japan, Korea and Taiwan is revised. Twenty-two species in total, of which 2 species are divided into 2 subspecies each, are found in the region and all are dealt with here. Of them 4 species from Taiwan, *U. miyakei, U. nakanei, U. takagii* and *U. nanshanchica*, and 1 subspecies from Nansei Iss., *U. excisa nanseiensis*, are described as new to science. *U. bonzica bonzica* sensu Nakane, 1956, is referred to *U. latimanus* Kolbe. *U. bonzica robustior* Nakane is suppressed as a synonym of *U. bonzica* Marseul. *U. bonzica hikosana* Nakane and *U. excisa lewisi* Nakane are raised to the specific rank, and *U. fujitai* Masumoto is regarded as a subspecies of *U. marseuli* Nakane. *U. fukiensis* Kaszab is recorded from Taiwan for the first time. A key to the species of *Uloma* from the region and illustrations of some diagnostic characteristics for them are also given.

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### Introduction

The genus *Uloma* includes more than 150 known species, and is well represented in East Asia, where some species are among the common tenebrionid beetles.

Although the species of the genus are very similar to each other in general, they are distinguished by the shape of the male mouthparts, antennae, protibiae, and aedeagus. In addition, the body form, size, and colouration are also useful characteristics for discriminating the species.

We have examined the species of the genus from Japan, Korea and Taiwan, especially with regard to the mentioned characteristics. The results may be summarized as follows:

- 1) *Uloma latimanus* Kolbe is not a synonym of *U. bonzica* Marseul but a good species, and *U. bonzica robustior* Nakane is a synonym of the latter.
- 2) Uloma bonzica hikosana Nakane and U. excisa lewisi Nakane should be raised to the specific rank.
- 3) Uloma fujitai Masumoto should be regarded as a subspecies of U. marseuli Nakane.
  - 4) A new subspecies, Uloma excisa nanseiensis, occurs in the Nansei Iss.
- 5) Four new species, *Uloma miyakei*, *U. nakanei*, *U. takagii* and *U. nanshan-chica*, occur in Taiwan.
  - 6) Uloma fukiensis Kaszab is to be recorded from Taiwan for the first time.

On this occasion, we have prepared a key to all the known species of the genus from the region and illustrations of their diagnostic characteristics. Holotypes of the new taxa are preserved in the collection of the National Science Museum (Nat. Hist.), Tôkyô.

Before going further, we wish to express our cordial thanks to Dr. T. Nakane, Kagoshima University, and Dr. K. Morimoto and Mr. M.T. Chûjô, Kyushu University, for permitting us to examine type specimens. Special thanks are due to the late Dr. Z. Kaszab, Természettudományi Múzeum, Budapest, for loaning many specimens, to Dr. C. Girard, Muséum National d'Histoire Naturelle, Paris, for permitting us to examine the type specimens of *Uloma bonzica*, and to Mr. S. Imasaka, Shimabara City, for giving many important suggestions concerning the genus. We are grateful to Messers. M. Kiuchi, Ibaraki Pref., S. Kondô, Sapporo City, Y. Kusui, Otaru City, S. Miyake, Tama City, M. Ôhara, Hokkaidô University, and K. Sawada, Tôkyô, who kindly offered many specimens for this study, and finally to Prof. S. Takagi, Hokkaidô, University, and Miss C. von Hayek and Mr. L. Jessop, British Museum (Nat. Hist.), for their kindness in reading the manuscript and offering invaluable suggestions.

## KEY TO THE SPECIES OF THE GENUS ULOMA FROM JAPAN, KOREA AND TAIWAN MAINLY BASED ON MALES\*

 Ligula with dense hairs. Pronotal excavation in males provided with two pairs of protuberances. A pair of smaller protuberances present just behind the excavation, and

<sup>\*</sup> Female *Uloma* sometimes cannot be identified with certainty in the absence of associated males.

	another pair near anterior margin of the pronotum. Body medium-sized
_	Ligula without hairs. Pronotal excavation in males variable in shape (wanting in <i>U. polita</i> ). Body small to large
2.	Ligula with hairy area narrow. Male mentum deeply concave, with its margin raised on
۵.	both sides. One of the end-thorns of male protibiae remarkably short
_	Ligula with hairy area wide. Male mentum not deeply concave. End-thorns of male
	protibiae nearly of the same length 5
3.	Eyes extremely transverse, lateral narrowest portion incuding only two facets. Large and
	robust species. 11-13 mm. Taiwan
	Eyes not so extremely transverse, lateral narrowest portion including at least three to five
	facets. 4
4.	Body nearly parallel-sided. Male protibiae wide and not emarginate in basal portion of
	inner margin. 10-11.5 mm. Japan, Korea
	portion of inner margin. 7.5-8 mm. Japan (Amami-Ôshima Is.).
	U. sakuraii Masumoto
5.	Body dark reddish brown, rather strongly flattened. Elytral intervals distinctly punctate.
0.	Eddy data regular proving raction of one particles and the particles of one particles of on
_	Body blackish brown to brown, comparatively thick. Elytral intervals finely punctate.
	7
6.	Eyes scarcely expanded laterally. Pronotum with lateral margins rather strongly ar-
	cuate. 8.5-9.5 mm. Japan
_	Eyes rather strongly expanded laterally. Pronotum with lateral margins subparallel in
_	basal half. 9.5-10.5 mm. Taiwan. U. miyakei sp. nov.
7.	Male protibiae not emarginate in basal portion of inner margin
8.	Male protibiae more or less emarginate in basal portion of inner margin
0.	
_	Male mentum neither entirely flattened nor closely punctate. 9
9.	Body blackish brown to almost black. Eyes scarcely expanded laterally. Propleura
	strongly and rugosely punctate. Upper surface of male protibiae coarsely, closely and
	confluently punctate. 9.2-11.5 mm, Japan, Korea U. bonzica Marseul
_	Body brownish. Eyes rather strongly expanded laterally. Propleura rugose, but punc-
	tures obsolescent. Upper surface of male protibiae sparsely and finely punctate. 10.5-11
1.0	mm. Taiwan. U. nakanei sp. nov.
10.	Male protibiae strongly and rather abruptly emarginate in basal portion of inner margin.
	Female anal sternite margined
	not margined; if margined, only obscurely. 7.5-10.5 mm. Japan (Nansei Iss.).
	U. excisa nanseiensis subsp. nov.
11.	Lateral margins of pronotum fine. Upper surface of male protibiae confluently punctate.
	8.3-10.6 mm, Taiwan. U. excisa excisa Gebien
_	Lateral margins of pronotum wide. Upper surface of male protibiae not confluently
	punctate. 9.2-10.2 mm. Japan
12.	•
_	Body less than 9 mm. Parameres of male genitalia not truncate but protruding apically.
13.	Body rather remarkably convex above. Metasternum short. Male mentum hairless.
10.	Apex of parameres of male genitalia lacking a semicircular depression. 10.5-12.5 mm.
	Japan (Yakushima Is.).  U. kondoi Nakane
_	Body not strongly convex above. Metasternum medium-sized. Male mentum with hairs
	arranged in a pair of half circles. Apex of parameres of male genitalia with a semicircu-
	lar depression present.
14.	Body black. Male pronotum lacking depression. Male antennae lacking projection at
	apex of each segment. Clypeus not ridged at apex in both sexes. 11-12 mm. Japan
	(Yaeyama Iss.), Taiwan, Southeast Asia, etc

_	Body brownish. Pronotum at least in males depressed anteriorly. Male antennae with 5th and 7th, or 5th, 7th and 9th segments projecting at apex of inner side. Clypeus at least
15.	in males ridged apically. 15 Pronotum depressed anteriorly not only in males but also in females. Fifth and 7th
10.	antennal segments each with a projection in males. Clypeus ridged at apex in both sexes. 11-13.1 mm. Taiwan
	Pronotum of females without depression. Fifth, 7th, and 9th antennal segments each with a projection in males. Clypeus in females without apical ridge. 9-10.5 mm. Taiwan.  U. nanshanchica sp. nov.
16.	Eyes small and very coarsely facetted, with only a single facet at narrowest point.  Pronotum with lateral marginations fairly wide. 9 mm. Taiwan (new record), China.  U. fukiensis Kaszab
_	Eyes rather large, with at least 2 facets at narrowest point. Pronotum with lateral marginations narrow
17.	Antennae short and strongly dilated apically. Mentum in males distinctly transverse. Apex of inner margin of male protibiae without projection. 9 mm. Taiwan.
_	Antennae not strongly dilated apically. Mentum in males narrower and subhexagonal in outline. Apex of inner margin of male protibiae pointed
18.	Male protibiae with a row of granules along groove. Male mentum with a pair of tufts.
_	Male protibiae lacking a row of granules along groove. Male mentum hairless.
19.	Hairs of male mentum short and arranged in two small ovoid patches. 6.2-8.2 mm. Japan (Amami-Ôshima Is.)
	Hairs of male mentum rather long and arranged in two crescent-shaped patches. 6.5 mm.  Taiwan. U. sauteri Kaszab
20.	Body dark brownish to brown. 21 Body reddish brown. 22
21.	Inner margin of male protibiae not emarginate at base. Male mentum rather strongly and longitudinally depressed in middle. Male genitalia with parameres constricted near apex. 6.3-6.5 mm. Japan (Ishigakijima Is.)
_	Inner margin of male protibiae emarginate at base. Male mentum flattened. Male genitalia with parameres not constricted near apex. 6.6-7.2 mm. Taiwan.
22.	Supra-antennal lobes wider than eyes in males. Male pronotum with a pair of small but distinct protuberances just behind depression. 7.3-7.7 mm. Japan (Iriomotejima Is.).  U. takarai M.T. Chûjô
_	Supra-antennal lobes slightly narrower than eyes. Pronotal protuberances obsolete.
23.	Body comparatively large (7.5-9 mm), less subparallel-sided, more convex above. Pronotum less clearly punctate on disc, elytra less deeply punctate-striate with intervals less distinctly convex. Mentum and male genitalia shown as figs. 82-84. Japan, Korea.  **U. marseuli marseuli* Nakane**
	Body comparatively small (6.8-8.5 mm), more subparallel-sided and less distinctly convex above. Pronotum more clearly punctate on disc; elytra more deeply punctate-striate with intervals more convex. Mentum and male genitalia shown as figs. 85-87. Japan (Daitôjima Iss.).  **U. marseuli fujitai Masumoto, status nov.**

### DESCRIPTIONS

# Uloma tsugeae Masumoto, 1982 Figs. 1-4

Uloma tsugeae Masumoto, 1982, Elytra, 10:23, figs. 3-2, 4-1a, 1b.

Specimens examined: 12♂ 28♀, collected from the following localities: Taiwan—Fenchihu; Fengkangshan; Tenghsi; Taiyuanshan; Liukuei.

Distribution: Taiwan.

Notes: This species can be easily distinguished from the other congeners occurring in Taiwan by the ligula narrowly haired in both sexes.

It is noteworthy that the range of the species with a hair-bearing ligula is confined to Japan, Korea, Taiwan, China and Vietnam so far as the known species are concerned. Ten species of the 22 covered by this paper belong to this apparently monophyletic group.

### Uloma latimanus Kolbe, 1886 Figs. 5-9

Uloma latimanus Kolbe, 1886, Arch. Naturg., 52 (1): 202, pl. XI, fig. 34. Uloma bonzica bonzica sensu Nakane, 1956, Sci. Rep. Saikyo Univ., 2 (3), A: 166, pl. II, figs. 21-22.

Specimens examined: 50 \$\textit{7}\$ 73 \$\darksq\$, collected from the following localities: Japan—Hokkaidô: Maruyama, Sapporo; Moiwayama, Sapporo; Shikotsu-ko; Akanuma, Oshima; Hekirichi-rindô, Oshima; Gabino, Hakodate. Honshû: Towada, Aomori; Koyasu Spa, Akita; Chûkai-mura, Yamagata; Yasugamori, Fukushima; Yunohana Spa, Fukushima; Hakase Pass, Fukushima; Tateiwa-dani, Fukushima; Nippara, Okutama, Tôkyô; Mt. Mitoo, Tôkyô; Takaozan, Tôkyô; Mt. Hoodatsu, Ishikawa; Daibosatsu, Yamanashi; Mimune, Mie; Ôdaigahara, Mie; Obakodake, Nara; Kasugayama, Nara; Matsune, Kozagawa, Wakayama; Mt. Gagyû, Okayama. Kyushu: Mt. Kunimi, Kumamoto; Minamata, Kumamoto; Kurino, Kagoshima. Izu Iss: Niijima Is; Kôzujima Is. Tsushima Is.: Mt. Aria-ke; Hitakatsu; Sasu Pass; Mt. Furisode; Izuhara; Ôboshiyama. Yakushima Is.: Ôkawa; Miyanoura. Korea—Guriong chon, Kum-gang san, Prov. Kanwon; Mts. Mjohjang-san, vall. Munsu-ton, dist. Hjangsan; Mts. Jirisan, Hwaeom-sa, near Nogodan.

Distribution: Japan (Hokkaidô, Honshû, Kyûshû, Izu, Iss., Tsushima Is., Yakushima Is.); Korea.

Notes: As is often the case with the species of this genus, the species occurring in Japan are quite similar to each other in appearance and have been confused by previous authors.

In his original description, Kolbe compared *U. latimanus* with the European *U. culinaris* Linné, and stated as follows: "Ungefähr von der Grösse des *culinaris*, hat sie einen mehr gestreckten und fast parallelen Körper".

Lewis (1894) recorded *U. latimanus* Kolbe from Japan for the first time and noted as follows: "this species is relatively longer than *U. bonzica*, Mars., and measures 7 to 13 mill. The small examples are often pale in colour like those

recorded by Marseul for U. bonzica".

Later Nakane (1956), who examined the Japanese species, suggested that *U. latimanus* Kolbe might be a synonym of *U. bonzica* and described two new subspecies of *U. bonzica* (*U. bonzica hikosana* and *U. bonzica robustior*). It is probable that the smaller and pale coloured form of *U. latimanus* noted by Lewis is identical to *U. hikosana* Nakane or *U. marseuli* Nakane. On the other hand, the form treated by Nakane under the name *U. bonzica bonzica* does not belong to *U. bonzica* Marseul (= *U. bonzica robustior* Nakane: see the note under *U. bonzica*), but is identical to *U. latimanus*, which is quite distinct from *U. bonzica* in its elongate body shape. *U. bonzica* is rather similar to *U. culinaris* in body shape.

Judging from the structure of oral appendages and male protibiae, *U. latimanus* Kolbe appears to be related to *U. sakuraii* Masumoto from Amami-Ôshima Is. and *U. tsugeae* Masumoto from Taiwan.

# Uloma sakuraii Masumoto, 1983 Figs. 10-13

Uloma sakuraii Masumoto, 1983, Ent. Rev. Japan, 38: 89, figs. 13, 15, & 17.

Specimens examined: 7♂ 12♀, collected from the following localities: Amami-Ôshima Is.—Hatsuno; Ikari.

Distribution: Japan (Amami-Ôshima Is.).

Notes: This species is known only from Amami-Ôshima Is., an island lying south of Kyûshû.

### Uloma hikosana Nakane, 1956, status nov.

### Figs. 14-17

Uloma bonzica hikosana Nakane, 1956, Sci. Rep. Saikyo Univ. 2 (3), A: 167, pl. II, fig. 23.

Specimens examined: 15♂ 14♀, collected from the following localities: Japan—Honshû: Takaozan, Tôkyô; Okutama, Tôkyô; Ôyama, Kanagawa; Ogasayama, Shizuoka; Asakumadake, Mie; Mimune, Mie; Kasugayama, Nara. Shikoku: Irazuyama, Kôchi (after Mr. S. Imasaka, personal communication). Kyûshû: Wakasugiyama, Fukuoka; Mt. Shiraga, Kumamoto; Miike, Miyazaki.

Distribution: Japan (Honshû, Shikoku, Kyûshû).

Notes: U. hikosana can be easily recognized by the body fairly flattened and its colour stably dark reddish brown. Immature specimens of U. bonzica resemble U. hikosana, but the intervals of elytra are more distinctly punctate in the latter.

Uloma miyakei sp. nov.

Figs. 18 & 19

This new species is closely related to U. hikosana Nakane from Japan, but can be distinguished from the latter by the following characteristics:

Male: Body more slender and more subparallel-sided. Head more transverse, with a wider Y-shaped groove; eyes more transverse and more strongly expanded

laterally. Antennae shorter and more slender, with 11th segment longer, relative length of segments (from basal to apical segment) as follows: 1.2, 0.3, 0.6, 0.4, 0.4, 0.5, 0.6, 0.6, 0.6, 0.6, 1.0.

Pronotum narrower, about 1.3 times as broad as long, broadest at basal 2/5, weakly arcuate laterally; disc a little more closely and distinctly punctate, more deeply depressed in anterior portion.

Elytra a little less than 1.8 times as long as broad, 2.5 times as long as pronotum and slightly broader than the latter; intervals less convex, rather closely scattered with microscopic but distinct punctures.

Mentum resembles that of *U. hikosana*. Prosternum shorter, less distinctly raised medially.

Relative length of segments of pro-, meso- and metatarsi (from basal to apical segment) as follows: 1.0, 0.4, 0.4, 0.4, 1.4; 1.5, 0.6, 0.5, 0.4, 1.6; 2.1, 0.6, 0.5, 1.8.

Male genitalia as shown in figs. 18 and 19.

Female: As in male, distinguishable from *U. hikosana* by the more slender body and also by the eyes more strongly expanded laterally.

Body length: 9.5-10.5 mm.

Holotype:  $\Im$ , Lishan, Taichung Hsien, Taiwan, 28. IV. 1974, Y. Miyake leg. Paratypes:  $1\Im$  4  $\updownarrow$ , same data as the holotype;  $1\Im$ , ditto, 28. VII. 1973, Y. Miyake leg.

Distribution: Taiwan.

Notes: *Uloma miyakei* can be distinguished from the other congeners occurring in Taiwan by the combination of the following characteristics: 1) body rather strongly flattened and consistently reddish brown in colour; 2) ligula widely covered with hairs, and male mentum flattened and not distinctly punctate; 3) male protibiae not emarginate at basal portion of inner margin; 4) anal sternite in females lacking an impressed line near apex.

# Uloma nomurai Masumoto, 1982

Figs. 20-23

Uloma nomurai Masumoto, 1982, Elytra, 10:25, figs. 3-4, 4-3a, 3b, 3c, & 3d.

Specimens examined:  $8 \ 7 \ 10 \ \$ , collected from the following localities: Taiwan —Meifeng, Sunkang.

Distribution: Taiwan.

Notes: *Uloma nomurai* is characterized by having a hairy ligula like some other species. It is rather isolated from them in having the male mentum entirely flat and closely punctate.

### Uloma bonzica Marseul, 1876

Figs. 24-27

Uloma bonzica Marseul, 1876, Ann. Soc. ent. Fr., 5 (6): 114.

Uloma bonzica robustior Nakane, 1956, Sci. Rep. Saikyo Univ., 2 (3), A: 167, pl. II, fig. 24, syn. nov.

Specimens examined:  $72 \ 71 \ ?$ , collected from the following localities: Japan

—Hokkaido: Yasukuni, Abashiri; Mt. Apoi, Hidaka; Nopporo, Ebetsu; Nishioka, Sapporo. Honshu: Chûkai-mura, Yamagata; Yunohana, Fukushima; Kamitobuki, Tôkyô; Takaozan, Tôkyô; Mt. Mutsuishi, Tôkyô; Hôkizawa, Kanagawa; Yokoshi, Tochigi; Kanuma, Tochigi; Kurokawa, Niigata; Narusawa-mura, Yamanashi; Anayama, Yamanashi; Gotemba, Shizuoka; Kuroda Dam, Aichi; Kawaguchi, Mie; Toba, Mie; Fujitani, Ueno, Mie; Kasugayama, Nara; Sanzen'in, Kyoto; Yuasa, Arita, Wakayama; Mt. Ôishi, Wakayama; Reiganji, Wakayama; Mt. Gagyû, Okayama; Hirose, Okayama; Mihara-shi, Hiroshima; Tokuyama-shi, Yamaguchi. Shikoku: Koyadaira, Tokushima; Sanoyama, Ehime. Kyûshû: Nagasaki; Mt. Kunimi, Kumamoto; Mt. Shiraga, Kumamoto; Kuwanotsuru, Kumamoto; Ôura-chô, Kagoshima; Sata, Kagoshima. Sado Is.: Mt. Myôkensan; Kimpoku-tôge. Oki Is. Tsushima Is.: Ariakeyama; Sasu Pass; Mt. Ondake; Mt. Tatera. Amami-Ôshima Is.: Mt. Yuwan. Korea — Sarivon; Myochyang; Mt. Mudeungsan, near Kwangju.

Distribution: Japan (Hokkaidô; Honshû; Shikoku; Kyûshû; Sado Is.; Oki Is.; Tsushima Is.; Amami-Ôshima Is.); Korea.

Notes: Specimens from the type-series (one male and one female, lectotype not selected) of U. bonzica Marseul were examined. A paratype of U. bonzica robustion Nakane was also examined and this supposed subspecies is identical to Marseul's species.

Previous records made under the name *U. bonzica* from various parts of Japan probably include *U. latimanus*, because these species are quite similar to each other. Females of *U. lewisi* are very similar to those of *U. bonzica*, but in the latter the anal sternite has no impressed line near the apex.

### Uloma nakanei sp. nov. Figs. 28 & 29

This new species is closely allied to *Uloma bonzica* Marseul, which is widely distributed in Japan and its adjacent areas, but can be distinguished from the latter by the following characteristics:

Male: Body larger, light brown in colour. Head more distinctly grooved in a Y-shape, the groove with apices more widely apart; eyes a little larger and more strongly expanded laterally. Antennae with relative length of segments (from basal to apical segment): 1.6, 0.4, 0.6, 0.5, 0.6, 0.6, 0.7, 0.7, 0.7, 0.7, 1.1; apical segment (11th) 1.3 times as broad as long.

Pronotum about 1.5 times as broad as long, more distinctly convex above, a little more closely punctate throughout; front angles less acute; disc semicircularly depressed anteriorly, with 2 hind protuberances more apart from each other. Scutellum wide subpentagonal, scattered with minute punctures in basal portion.

Elytra 1.7 times as long as broad, a little less than 3 times as long as pronotum and slightly broader than the latter; disc more finely striate, the strial punctures set more closely; intervals wider, less distinctly convex, rather smooth and microscopically punctate.

Mentum similar to that of *U. bonzica*; gula triangular, with fine impressions on both sides. Prosternum a little longer, less coarsely punctate. Protibiae similar to those of *U. bonzica*, but the upper surface more sparsely punctate, the punctures

being not confluent. Relative length of tarsal segments of pro-, meso- and metatarsi (from basal to apical segment): 0.7, 0.4, 0.4, 0.5, 1.7; 1.6, 0.4, 0.4, 0.6, 1.8; 2.4, 0.7, 0.6, 2.2.

Male genitalia as shown in figs. 28 and 29.

Female: As in male, distinguishable by the more slender body, by the less rugose propleura, and by the eyes more strongly expanded laterally.

Body length: 10.5-11 mm.

Distribution: Taiwan.

Notes: Only the three specimens are available for study.  $Uloma\ nakanei$  closely resembles  $U.\ bonzica$ , but appears to be distinct as stated above.

Uloma lewisi Nakane, 1956, status nov.

Figs. 30-33

Uloma excisa lewisi Nakane, 1956, Sci. Rep. Saikyo Univ., 2 (3), A: 167, pl. II, figs. 26 & 27.

Specimens examined: 41 ♂ 39 ♀, collected from the following localities: Japan —Hokkaidô: Tomuraushi; Toyohiragawa, Sapporo; Utonaiko, Iburi; Yunosato, Oshima. Honshû: Tsuta Spa, Aomori; Asamai, Akita; Yunohana, Fukushima; Ôgoe, Fukushima; Nogi-chô, Tochigi; Kinugawa, Tochigi; Shiobara, Tochigi; Marunuma, Gumma; Yatabe, Ibaraki; Takaozan, Tôkyô; Kamihoshikawa, Yokohama; Kamigô, Yokohama; Naoetsu, Niigata; Matsunami, Kashiwazaki, Niigata; Kurokawa, Niigata; Bessho Spa, Nagano; Hinoharu, Yamanashi; Daibosatsu, Yamanashi; Honkawane-chô, Shizuoka; Okazaki, Aichi; Asakumadake, Mie; Kôraibiro, Mie; Ôsaka; Yuasa, Arita, Wakayama; Mt. Gagyû, Okayama; Yoshinaga-chô, Okayama; Hagi, Yamaguchi. Shikoku: Soshikidai, Kagawa; Koyadaira, Tokushima; Kuroson, Kôchi. Kyûshû: Kanoudake, Fukuoka: Kurino, Kagoshima; Ôura-chô, Kagoshima.

Distribution: Japan (Hokkaidô; Honshû; Shikoku; Kyûshû).

Notes: This species is widely distributed in Japan, but there has been no record of its occurrence from any of the smaller islands (e.g. Yakushima Is., Tsushima Is., etc.) of Japan.\*

Females of this species are distinguishable from those of the other species by the presence of an impressed line on the anal sternite.

Uloma excisa excisa Gebien, 1913

Figs. 34-37

Uloma excisa Gebien, 1913, Arch. Naturg., 79, A 9: 24, fig. 7.

Specimens examined: 31♂ 45♀, collected from the following localities: Taiwan—Lishan; Nanshanchi; Lushanwenchuan 1300 m; Wushe; Jihyuetan; Shih-

Recently Mr. S. Kondo has informed us about the presence of the species on Sado Is., though
we have had no chance to confirm the record.

tzutou 600 m; Liukuei.

Distribution: Taiwan; China; Vietnam.

Notes: This is one of the commonest species of the genus in Taiwan.

Uloma excisa nanseiensis subsp. nov.

Fig. 38

This new subspecies is widely distributed in Nansei Iss. and differs from the nominotypical subspecies from Taiwan as follows:

Male: Body transversely, more clearly convex above and pronotum more finely punctate. Protibiae only weakly emarginate in basal portion of inner margin, i.e., basal portion of protibiae thicker as shown in fig. 38.

Female: Apical impressed line on anal sternite absent or obsolescent.

Body length: 7.5-10.5 mm.

Holotype: ♂, Hatsuno, Amami-Ôshima Is., 31. III. 1966, Y. Kusui leg. Paratypes: Nakanoshima Is.—1♂, 7. VII. 1960, M. Satô leg.; 1♀, 25. VI. 1962, H. Yokoyama leg.; 3♂ 3♀, 15. VII. 1982, M. Ôhara leg. Amami-Ôshima Is.—1♂, Shimmura, 29. III. 1963, H. Maruoka leg.; 2♂ 2♀, ditto, 29. III. 1962, S. Sakurai leg.; 1 ♂, ditto, 1. IV. 1966. Y. Kusui leg.; 6 ♂ 3 ♀, Hatsuno, 24. III. 1963, S. Fukuda leg.; 1 ♀, ditto, 4. IV. 1964, H. Kawai leg.; 4♂6♀, ditto, 11. VIII. 1964, K. Sugawara & S. Sakurai leg.; 26♂ 21♀, ditto, 24. III.-4. IV. 1965, S. Sakurai leg.; 2♂ 4♀, ditto, 22. VII. 1965, S. Fukuda; leg. 4♂ 6♀, ditto, 29. III.-4. IV. 1966. Y. Kusui leg.; 2♂ 2♀, ditto, 31. XII. 1967, Y. Miyake leg.; 1♂ 1♀, ditto, 30. III. 1970, I. Matoba leg.; 2♂ 1♀, ditto, 3. IV. 1970, S. Miyake leg.; 1♂, ditto, 28. VI. 1970, K. Sakai leg.; 1♂, ditto, 30. VI. 1970, I. Matoba leg.; 3♂ 3♀, ditto, 5. VII. 1970, K. Sakai leg.; 5♂ 4♀, ditto, 11. VII. 1970. S. Miyake leg.; 1⊅, ditto, 28-31. VI. 1972, M. Kuboki leg.; 1♀, ditto, 12. VII. 1972, T. Syôda leg.; 2♂ 3♀, ditto, 28. III. 1975, Y. Okuda leg.; 1♀, ditto, 12. IV. 1976, S. Suzuki leg.; 2♂ 1♀, ditto, 27. IX. 1975, K. Sawada leg.; 1♂ 1♀,Yuwan, 8. IV. 1970, K. Sugino leg.; 1♂, ditto, 27. IX. 1975, K. Sawada leg.; 1♀, ditto, 2-4. V. 1976, Y. Obata leg.; 2♂3♀, ditto, 1. I. 1980, K. Murakami leg.; 1♀, Koshuku, 22. VII. 1968, H. Susumu leg.; 29, Akatsuchiyama, 3. VII. 1978, R. Toyoshima leg.; 1 \, ditto, 2. VII. 1977, Kume leg.; 2 \, Higashinakama, 13. III. 1965, S. Fukuda leg.; 2♂, ditto, 23. III. 1965, S. Sakurai leg.; 1♂1♀, Santarôtoge, 1. IV. 1965, Y. Takeda leg.; 1♂, Chûô-rindô, 31. III. 1982, T. Ochi leg. Tokunoshima Is. —1 ♂, V. 1972, M. Takakuwa leg.; 1 ♂, Mikyôdake, 12. VIII. 1982, T. Moriyama leg.; 2♂, Gozendô, 6. IX. 1983, M. Ôhara leg.; 7♂6♀, Sutarumata, 13. IV. 1970, T. Kobayashi leg. Okinoerabujima Is.—2♂1♀, Ôyama, 17. VII. 1981, M. Ôhara leg. Okinawa-Hantô Is.—1, Yona, 19. VII. 1975, Y. Kusui leg.; 1, ditto, 23. IV. 1977, N. Nishikawa leg.; 1♂3♀, ditto, 3. V. 1981, T. Fujisawa leg.; 1♀, Yonaha, 12. VI. 1978, K. Kawada leg.; 1♂8♀, ditto, 1. IX. 1979, T. Matsumoto leg.; 2♀, Ada, 17. VIII. 1976, Y. Kusui leg.; 2♂1♀, Oku, 29. III. 1977, N. Nishikawa leg. Iheyajima Is. -3♂5♀, Dana, 12. VIII. 1977, Y. Kusui leg. Miyakojima Is.--1♂1♀, Ônogoe, 5. V. 1978, Y. Kusui leg. Irabujima Is.—3♂17♀, Kuninaka, 1-3, V. 1978, Y. Kusui leg. Taramajima Is.—2♂3♀, 27. VIII. 1979, Y. Kusui leg. Ishigakijima Is.—1♀, Omoto, 3. V. 1977, S. Kondô leg. ; 1♀, Bannadake, 17. II. 1982, K. Sawada leg. ; 1♀, Takeda, 18. II. 1982, K. Sawada leg.; 1♂1♀, Kawarabashi, 5. IX. 1984, T. Hanatani leg. Iriomotejima Is.—1♀, Yonehara, 20. III. 1976, K. Murakami leg.; 4♂4♀, Sonai, 6.

VIII. 1967, Iwata leg.;  $3 \nearrow 1 ?$ , Shirahama, 1. VI. 1974, M. Takakuwa leg.; 2 ?, ditto, 22–23. III. 1982, M. Kiuchi leg.;  $1 \nearrow 1 ?$ , ditto, 4. VIII. 1967, Iwata leg.;  $1 \nearrow$ , Kuroshima Is., 15. VII. 1976, K. Furukawa leg. Yonagunijima Is.— $1 \nearrow$ , 9. VII. 1962, H. Maruoka leg.;  $1 \nearrow 1 ?$ , Urabu, 3. IV. 1983, M. Takeda leg.;  $2 \nearrow 1 ?$ , 12. I. 1977. Y. Kusui leg.

Distribution: Japan (Nansei Iss.).

Notes: Many authors have recorded *U. excisa* Gebien from the Nansei Iss., but the specimens from those islands can be distinguished from the Taiwanese nominotypical form by some characteristics mentioned above. The impressed line of the female anal sternite frequently appears in specimens from southern islands but disappears in most specimens from northern islands.

Uloma kondoi Nakane, 1968 Figs. 39-43

Uloma kondoi Nakane, 1968, Fragm. Col., 19: 77.

Specimens examined: 3♂6♀, collected from the following localities: Japan—Yakushima Is.; Hananoegô; Kosugidani; Ôkawa.

Distribution: Japan (Yakushima Is.).

Notes:  $Uloma\ kondoi$  is known only from Yakushima Is., an island lying south of Kyûshû, and there are no closely allied species treated in this paper. The hind wings are very short (about 1/2 of the elytra) and the metasternum is also shortened.

Uloma polita (Wiedemann, 1821) Figs. 44-47.

Phaleria polita Wiedemann, 1821, in Germar's Mag. Ent., 4: 149. Uloma polita: Gebien, 1912, Jahrb. Nass. Ver., 65: 234.

Specimens examined: 16♂14♀, collected from the following localities: Japan—Ishigakijima Is.: Tonoshiro; Yonehara; Hirakubo; Ishigaki-shi. Iriomotejima Is.: Ôhara; Shirahama; Sonai; Ôtomi-rindô; Yonehara; Uehara. Yonagunijima Is.: Higawa; Irizaki.

Distribution: Japan (Yaeyama Iss.); Taiwan; China; Burma; India; Sri Lanka; Madagascar; Mauritius, etc.

Notes: This species is usually collected at light or under rotten wood. It is an unusual form in having an undepressed pronotum in males, but probably related to *U. rubripes* (Hope) and allied species so far as male genitalia are concerned.

Uloma takagii sp. nov.

Figs. 48-52

Reddish brown, with head, margins of pronotum, margins of procoxae, apices of femora, basal portions and outer margins of tibiae, etc., blackish brown; head, pronotum and undersurface moderately shining, elytra rather strongly shining. Elongate, subparallel-sided, moderately and longitudinally convex.

Male: Head rather subhexagonal, gently convex posteriorly and broadly

flattened in middle, closely punctate, the punctures a little coarser posteriorly, raised in a wide U-shape in anterior half, the elevation interrupted by a short longitudinal impression at median of posterior portion; clypeus slightly emarginate anteriorly, with a transverse ridge, the base of which is about 3/5 times, and the apex about half, as wide as the clypeus, both sides of the ridge are pointed; genae rather large with outer margins obliquely straight in anterior 2/3, then obtusely curved backwards, gena-clypeal borders finely grooved, areas before eyes rather widely depressed; eyes rather large and transverse, convex above and laterad, distance between them 2.5 times their diameter; vertex transversely grooved anteriorlly. Antennae rather short, reaching apical 1/3 of pronotum, 7 apical segments thickened and slightly clavate, 5th less distinctly and 7th noticeably pointed laterad at apex of inner side, 10th remarkably transverse, 11th rather reniform, relative length of segments (from basal to apical segment): 2.0, 0.4, 0.7, 0.5, 0.7, 0.6, 0.7, 0.6, 0.7, 0.7, 1.2.

Pronotum a little more than 1.4 times as broad as long; front border gently arcuate and slightly bisinuate; base feebly produced in medial 2/5 and slightly sinuous on both sides; sides arcuate and rather finely bordered; front angles subrectangular with corner rounded; hind angles a little obtuse; disc moderately convex above, rather closely punctate, sparsely intermixed with minute punctures, with a transverse-ovoid depression in antero-medial portion, posterior edge of the depression rather impunctate and shortly impressed medially. Scutellum wide subpentagonal, scattered with minute punctures.

Elytra a little less than 1.8 times as long as broad, 2.6 times as long as pronotum and slightly broader than the latter, subparallel-sided in basal 3/5, gradually narrowing towards apices, which are narrowly rounded and produced; disc punctate-striate, the punctures in striae notching intervals, distance between them about 0.8-1.5 times their diameter; intervals gently convex, rather distinctly so laterally, faintly, rather transversely microreticulate, fairly closely scattered with microscopic punctures; sides steeply declined to lateral margins, which are hardly visible from above.

Mentum short and subcordate, slightly concave, nearly entirely rimmed with hairs; gula triangular, impressed on both sides; terminal segment of each maxillary palpus medium-sized, with arcuate outer side about 1.8 times as long as the inner and 1.3 times as long as arcuate apical side.

Prosternum medium-sized, asperate, bordered at apex, strongly raised medially, with 2 rows of short yellowish hairs; prosternal process blunt.

Legs rather short; protibiae not strongly dilated to apices, upper surface of apical portion shortly grooved, basal portion of inner margin narrowly emarginate, undersurface with a row of 4-6 teeth, of which a few posteriors are a little prominent; mesotibiae slightly bent at basal 1/3. Relative length of tarsal segments (from basal to apical segment): 1.1, 0.5, 0.5, 0.6, 2.4 (protarsi); 2.5, 0.5, 0.4, 0.4, 2.7 (mesotarsi); 3.5, 0.6, 0.5, 2.7 (metatarsi).

Female: Antennae not pointed at inner apices of 5th and 7th segments. Pronotum with a shallower and smaller anterior depression. Mentum trasverse-subhexagonal, asperate.

Body length: 11-13.1 mm.

Holotype: ♂, Nanshanchi, Nantou Hsien, Taiwan, 10. IV. 1972, Tu Chinlong leg. Paratypes; 1♂, same data as the holotype; 1♂, Nanshanchi, 17. VI. 1972, Tu

Chinlong leg.;  $1 \, \stackrel{\circ}{\downarrow}$ , ditto, V-VIII. 1972, Tu Chinlong leg.;  $1 \, \stackrel{\circ}{\downarrow}$ , Tenghsi, Kaohsiung Hsien, 2. VIII. 1983, Chen Wenlong leg.;  $7 \, \stackrel{\circ}{\nearrow} 7 \, \stackrel{\circ}{\downarrow}$ , Nanshanchi, no detailed data;  $1 \, \stackrel{\circ}{\nearrow} 1 \, \stackrel{\circ}{\downarrow}$ , Lishan, Taichung Hsien, 23. III. 1972, Y. Miyake leg.

Distribution: Taiwan.

Notes: The new species somewhat resembles *U. rubripes* (Hope, 1831) from Southeast Asia, but can be distinguished from the latter by the much shorter tarsal carinae of male protibiae and by the pronotum which is a little more distinctly convex above and with a differently shaped depression in males. *Uloma pre-himalayana* Kaszab from Bhutan and India (Assam) also have a pronotal depression in females, but it is much larger in size (13-16.5 mm).

Uloma nanshanchica sp. nov.

Figs. 53-57

Reddish brown, with apex of head, eyes, front and basal margins of pronotum, mouth parts, front margin of prosternum, etc., more or less darkened; strongly shining above, moderately so on undersurface. Rather elongate, subparallel-sided, moderately and longitudinally convex.

Male: Head transverse-elliptic, gently convex above, rather closely punctate, the punctures coarser towards posterior and lateral portions: clypeus emarginate anteriorly, noticeably ridged in medial 2/3 of front margin, the ridge is prominent on both sides; genae rather large, with outer margins obliquely arcuate; eyes transverse, slightly oblique, distance between them about 3 times their diameter; interocular space with a transverse elevation, of which both ends grow obliquely forwards across the genae and reach the outer margin, the elevation is interrupted in the middle of the posterior portion. Antennae rather short, reaching apical 1/3 of pronotum, 5th segment slightly, and 7th and 9th conspicuously, pointed at the apex of inner side, relative length of segments (from basal to apical segment): 1.6, 0.4, 0.6, 0.5, 0.6, 0.6, 0.7, 0.6, 0.8, 0.7, 0.9.

Pronotum 1.5 times as broad as long; front border slightly arcuate, rather noticeably so in medial quarter; basal border slightly bisinuate, produced in medial 1/3; sides arcuate and clearly bordered; front angles subrectangular with corner rounded; hind angles obtuse; disc rather distinctly convex above, fairly closely and rather coarsely punctate, sparsely intermixed with small punctures, anteromedially with a transverse-ovoid depression, of which the upper edge is interrupted medially.

Elytra about 1.7 times as long as broad, more than 2.4 times as long as and 1.1 times as broad as pronotum, broadest at apical 2/5, very slightly narrowed forwards and roundly narrowed towards rear, apices narrowly rounded and produced; disc punctate-striate, the punctures in striae notching intervals, distance between them about 1-2.5 times their diameter; intervals slightly convex in middle, rather distinctly so laterally, faintly and transversely microreticulate, microscopically punctate; sides steeply declined to lateral margins, which are invisible from above.

Mentum transverse-subcordate, slightly concave, nearly entirely rimmed with hairs; gula triangular, terminal segment of each maxillary palpus rather small, with arcuate outer side about 1.8 times as long as rounded inner side and twice as long as truncate apical side.

Prosternum medium-sized, asperate, without hairs in middle, bordered at apex,

distinctly raised medially, with prosternal process depressed and obtuse.

Protibiae shortly grooved on upper surface of apical portion, narrowly emarginate in basal portion of inner margin, with 4 to 5 teeth in a row on undersurface, the few posterior ones being prominent. Relative length of tarsal segments (from basal to apical segment): 0.8, 0.4, 0.4, 0.4, 1.8 (protarsi); 1.5, 0.5, 0.4, 0.4, 1.9 (mesotarsi); 2.2, 0.6, 0.5, 2.0 (metatarsi).

Female: Clypeus not ridged at apex. Antennae with 5th, 7th and 9th segments not pointed at apex of inner side. Pronotum without deperession. Mentum rugose. Body length: 9-10.5 mm.

Holotype: \$\sigma\$, Nanshanchi, Nantou Hsien, Taiwan, 12. VI. 1970, S. Fukuda leg. Paratypes:  $2 \sigma$ , Nanshanchi, 22. X. 1971, K. Masumoto leg.;  $1 \sipep$ , Nanshanchi, 27. VII. 1974, K. Matsumoto leg.;  $1 \sipep 1 \sipep 2$ , Nanshanchi, 20. V. 1974, Tu Chinlong leg.;  $1 \sipep 3$ , Nanshanchi, 7. V. 1974, Tu Chinlong leg.;  $1 \sipep 4$ , Nanshanchi, 7. V. 1974, Tu Chinlong leg.;  $1 \sipep 4$ , Shangping, Kaohsiung Hsien, 25. X. 1983, T. Endô leg.;  $1 \sipep 3$ , Paling, Taoyuan Hsien, 30. X. 1983, T. Endô leg.;  $1 \sipep 7$ , Nanshanchi, no detailed data.

Distribution: Taiwan.

Notes: This new species resembles *U. takagii* sp. nov., but can be easily distinguished from the latter by the smaller body, by the pronotum depressed only in males, and by the different shape of the male genitalia.

## Uloma fukiensis Kaszab, 1954 Figs. 58-63

Uloma fukiensis Kaszab, 1954, Annls. hist.-nat, Mus. natn. hung. (S.N.), 5: 254, figs. 4-7.

Specimen examined: 1♂, from the following locality: Taiwan—Liukuei, Kaohsiung Hsien, 18. VI. 1985, Chen Wenlong leg.

Distribution: Taiwan; China.

Notes: *Uloma fukiensis* was originally described from Fukien, China. This is the first record of the species from Taiwan, and the figures are based on the single male specimen available. Females are unknown.

### Uloma meifengensis Masumoto, 1982 Figs. 64-68

Uloma meifengensis Masumoto, 1982, Elytra, 10: 25, figs. 3-3, 4-2a, 2b, 2c, & 2d.

Specimens examined:  $2 \nearrow 3 ?$ , collected from the following localities: Taiwan — Tapan; Jihyuetan; Sungkang.

Distribution: Taiwan.

Notes: *Uloma meifengensis* is characterized by the short and strongly dilated antennae and the very broad mentum in males.

*Uloma ichoi* Nakane, 1956 Figs. 69-72

Uloma ichoi Nakane, 1956, Sci. Rep. Saikyo Univ. 2 (3), A: 168, pl. II, fig. 30.

Specimens examined: 17♂26♀, collected from the following localities: Japan—Amami-Ôshima Is.: Santarô-tôge; Higashinakama; Hatsuno; Sumiyô-mura.

Distribution: Japan (Amami-Ôshima Is.).

Notes: *Uloma ichoi* and the following species *U. sauteri* agree in having a row of small tubercles along male protibial groove. However, in *U. sauteri*, each tubercle is provided with a seta, whereas in *U. ichoi* not. These species also differ in the shape of the male mentum.

## *Uloma sauteri* Kaszab, 1941 Figs. 73-76

Uloma sauteri Kaszab, 1941, Stett, ent. Ztg., 102: 55.

Specimens examined: 5♂8♀, collected from the following localities: Taiwan—Nanshanchi; Hutieku; Liukuei; Shanpinlu.

Distribution: Taiwan.

Notes: As stated above, this species is very closely related to  $\it U.~ichoi$  from Amami-Ôshima Is.

### Uloma ishigakiensis M.T. Chûjô, 1983 Figs. 77-79

Uloma ishigakiensis M.T. Chûjô, 1983, Esakia, (20): 49, figs. 2A-2C.

Specimens examined: 2♂2♀, collected from the following localities: Japan —Ishigakijima Is.: Mt. Omoto; Mt. Banna.

Distribution: Japan (Ishigakijima Is.).

Notes: *Uloma ishigakiensis* can be distinguished from the other species occurring in the Japan-Taiwan region by the shape of male genitalia as shown in fig. 79.

### Uloma formosana Kaszab, 1941

Uloma formosana Kaszab, 1941, Stett. ent. Ztg., 102: 54, fig. 9.

Specimen examined: None. Distribution: Taiwan.

Notes: We have examined no specimens of this species.

Uloma takarai M.T. Chûjô, 1983 Fig. 80

Uloma takarai M.T. Chûjô, 1983, Esakia, (20): 51, figs. 3A-3C.

Specimen examined: 1♂ (holotype). Distribution: Japan (Iriomotejima Is.).

Notes: Figure of male mentum (fig. 80) is drawn from the holotype specimen.

## Uloma marseuli marseuli Nakane, 1956 Figs. 81-84

Uloma marseuli Nakane, 1956, Sci. Rep. Saikyo Univ., 2 (3), A: 168, pl. II, figs. 28 & 29.

Specimens examined: 94√88 \, collected from the following localities: Japan —Hokkaidô: Shumarinai, Sorachi; Butokama-rindô, Moshiri, Sorachi; Ikutahara, Abashiri; Yasukuni, Abashiri; Akan, Kushiro; Maruyama, Sapporo; Tomakomai, Iburi; Matsukage-chô, Hakodate. Honshû; Towada, Aomori; Chûkai-mura, Yamagata ; Yunohana Spa, Fukushima ; Yasugamori, Fukushima ; Õjiri-numa, Okunikkô, Gumma; Takao, Tôkyô; Itabashi-ku, Tôkyô; Toshima-ku, Tôkyô; Kamitobuki, Tôkyô ; Kompirayama, Chiba ; Yatabe, Ibaraki ; Hiyoshi, Kanagawa ; Kamigô, Yokohama, Kanagawa; Nakayama, Yokohama; Taura, Yokosuka, Kanagawa; Hôkizawa, Tanzawa, Kanagawa; Naoetsu, Niigata; Kamisekida, Nakakubiki-gun, Niigata; Okada, Matsumoto, Nagano; Kinkazan, Gifu; Daibosatsu, Yamanashi; Mt. Shiraha, Shizuoka; Gotemba, Shizuoka; Narukada, Shizuoka; Toba, Mie; Obakodake, Nara; Kasugayama, Nara; Yuasa, Arita, Wakayama; Mt. Ôishi, Wakayama; Matsume, Kozagawa, Wakayama; Mt. Gomanodan, Wakayama; Hirose, Okayama; Sugiga-tôge, Tokuyama-shi, Yamaguchi. Shikoku: Miyama, Ehime. Kyûshû: Hikosan, Fukuoka; Mt. Shiraga, Kumamoto; Mt. Kunimi, Kumamoto; Hagitayama, Kumamoto-shi; Sobosan, Õita; Kurino, Kagoshima; Shiroyama, Kagoshima; Õura-chô, Kagoshima. Izu Iss.: Niijima Is. Tsushima Is: Sasu Pass; Hitakatsu; Sasuna; Ariakeyama. Yakushima Is.: Ôkawa. Amami-Ôshima Is.: Hatsuno; Sumiyô-mura; Shimmura; Mt. Yuwan. Okinawa Hontô Is.: Gogayama. Ishigakijima Is.: Ishigaki-shi; Mt. Banna. Korea—Hwaeom-sa, near Nogodan; Mt. Jirisan; Soktan, Gensan.

Distribution: Japan (Hokkaidô; Honshû; Shikoku; Kyûshû; Izu Iss. (Nii-jima—Is.); Tsushima Is.; Yakushima Is.; Amami-Ôshima Is.; Okinawa Hontô Is.; Ishigakijima Is.); Korea.

Notes: In the Nansei Islands, there are some species likely to be confused with *U. marseuli*. This species can be distinguished from *U. ichoi* and *U. ishigakiensis* by the paler colour of the body, by the eyes slightly expanded laterally, and by the differently shaped male protibiae and genitalia. *U. marseuli* also can be distinguished from *U. takarai*, which is probably the most closely related to the former, by the supra-antennal lobes not expanded before eyes, the posterior pair of protuberances on the male pronotum obsolete, and the antennae shorter.

Uloma marseuli fujitai Masumoto, 1985, status nov.

Figs. 85-87

Uloma fujitai Masumoto, 1985, Ent. Rev. Japan, 40: 21, figs. 1-5.

Specimens examined: 18♂8♀, collected from the following localities: Japan—Minamidaito-jima Is.: Daitô-jinsha. Kitadaitô-jima Is.: Tôdai.

Ditribution: Japan (Daitô Iss.).

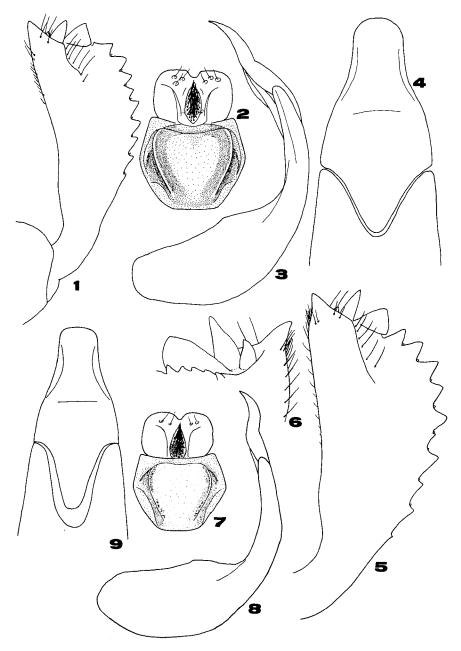
Notes: This form was originally described as a distinct species, having been

compared with U. takarai from Iriomote Is.

In the present study, we have compared it not only with *U. takarai* but also with *U. marseuli*, which occurs widely in Japan and its adjacent islands and also Korea. After our careful examination, we have concluded that *U. fujitai* is allied more to *U. marseuli* and that it may be better regarded as a geographical form of the latter.

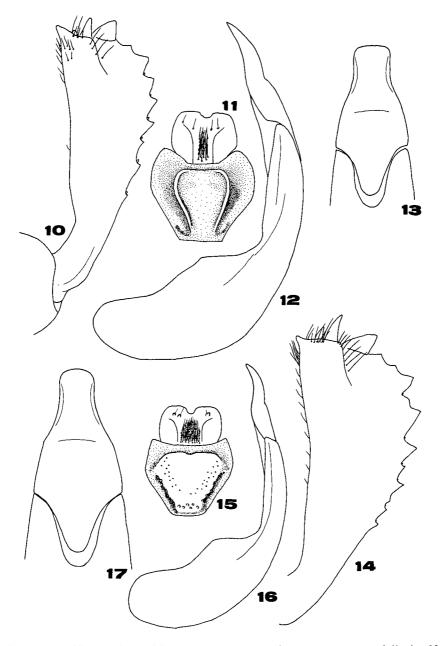
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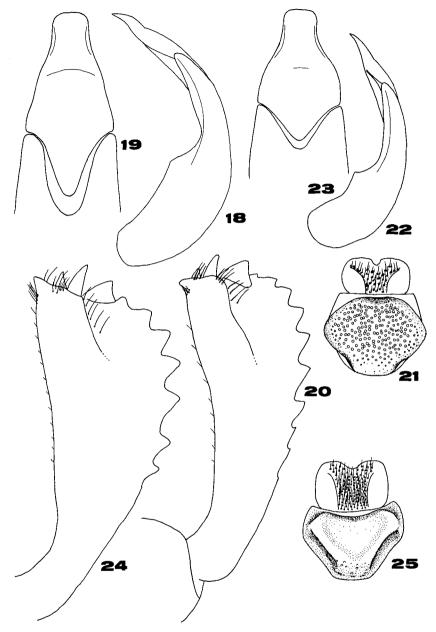
Figs. 1-4:  $Uloma\ tsugeae\ Masumoto,\ \sigma^3$ ; 1: protibia, 2: mentum and ligula, 3: genitalia (lateral view), 4: genitalia (apical portion in dorsal view).

Figs. 5-9: *Uloma latimanus* Kolbe, 3; 5: protibia, 6: protibia (apical portion of underside), 7: mentum and ligula, 8: genitalia (lateral view), 9: genitalia (apical portion in dorsal view).



Figs. 10-13: *Uloma sakuraii* Masumoto, ♂; 10: protibia, 11: mentum and ligula, 12: genitalia (lateral view), 13: genitalia (apical portion in dorsal view).

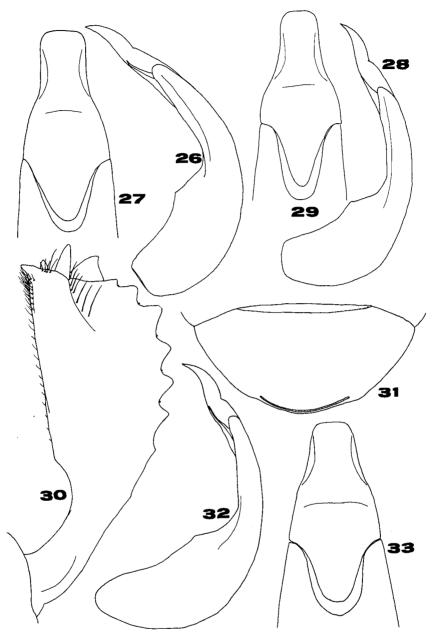
Figs. 14-17: *Uloma hikosana* Nakane, ♂; 14: protibia, 15: mentum and ligula, 16: genitalia (lateral view), 17: genitalia (apical portion in dorsal view).



Figs. 18–19:  $Uloma\ miyakei$  sp. nov.,  $\mathcal{S}$ ; 18: genitalia (lateral view), 19: genitalia (apical portion in dorsal view).

Figs. 20-23: *Uloma nomurai* Masumoto, 3; 20: protibia, 21: mentum and ligula, 22: genitalia (lateral view), 23: genitalia (apical portion in dorsal view).

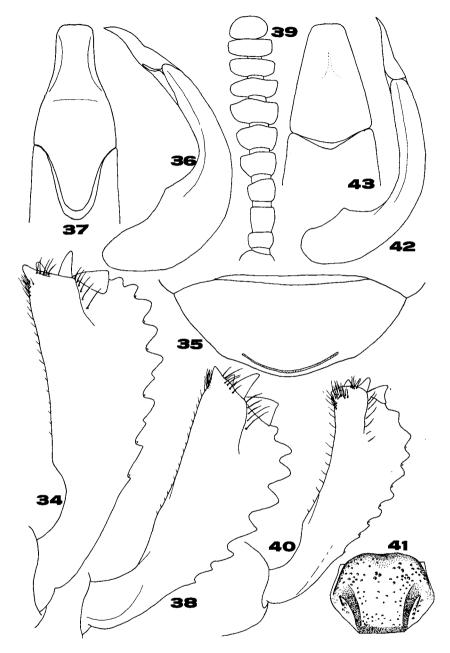
Figs. 24-25: *Uloma bonzica* Marseul, ♂; 24: protibia, 25: mentum and ligula.



Figs. 26–27 :  $Uloma\ bonzica$  Marseul,  $\nearrow$  ; 26 : genitalia (lateral view), 27 : genitalia (apical portion in dorsal view).

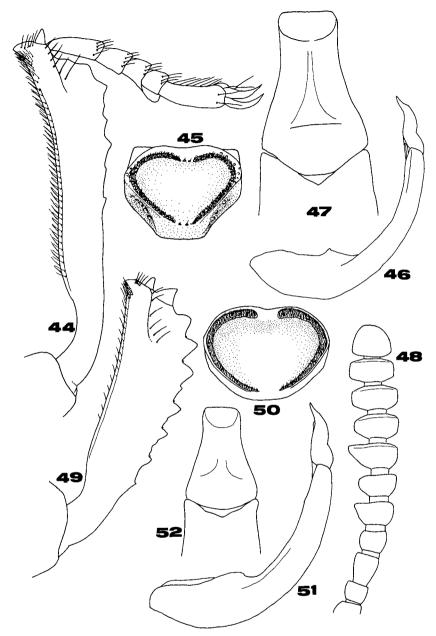
Figs. 28–29:  $Uloma\ nakanei\ sp.\ nov.,\ \mathcal{S}$ ; 28: genitalia (lateral view), 29: genitalia (apical portion in dorsal view).

Figs. 30-33: *Uloma lewisi* Nakane, ♂ (30, 32-33) and ♀ (31); 30: protibia, 31: anal sternite, 32: genitalia (lateral view), 33: genitalia (apical portion in dorsal view).



Figs. 34-37: *Uloma excisa excisa* Gebien, ♂ (34, 36-37) and ♀ (35); 34: protibia, 35: anal sternite, 36: genitalia (lateral view), 37: genitalia (apical portion in dorsal view). Fig. 38: *Uloma excisa nanseiensis* ssp. nov., ♂; 38: protibia. Figs. 39-43: *Uloma kondoi* Nakane, ♂; 39: antenna, 40: protibia, 41: mentum. 42:

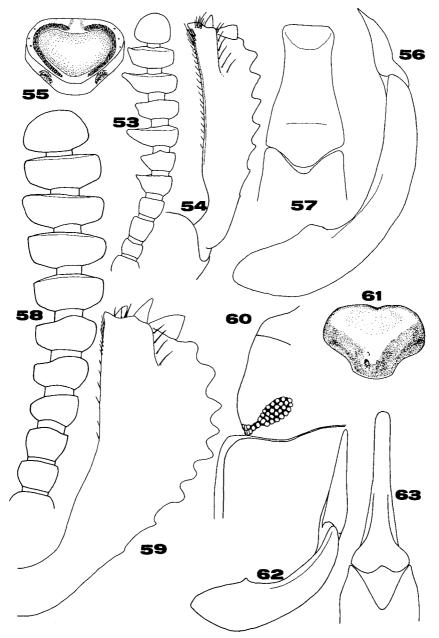
genitalia (lateral view), 43 : genitalia (apical portion in dorsal view).



Figs. 44-47: *Uloma polita* (Wiedemann), 3; 44: protibia and protarsi, 45: mentum, 46: genitalia (lateral view), 47: genitalia (apical portion in dorsal view).

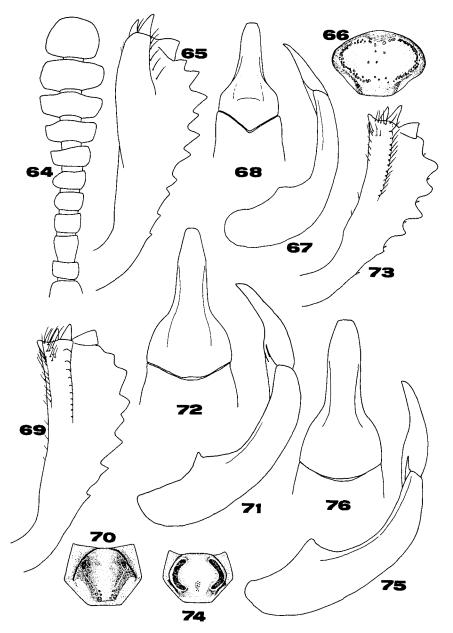
Figs. 48-52: *Uloma tahagii* sp. nov. 3: 48: antenna 49: protibia 50: mentum 51: geni

Figs. 48-52: *Uloma takagii* sp. nov., 3; 48: antenna, 49: protibia, 50: mentum, 51: genitalia (lateral view), 52: genitalia (apical portion in dorsal view).



Figs. 53-57: *Uloma nanshanchica* sp. nov.,  $\varnothing$ ; 53: antenna, 54: protibia, 55: mentum, 56: genitalia (lateral view), 57: genitalia (apical portion in dorsal view).

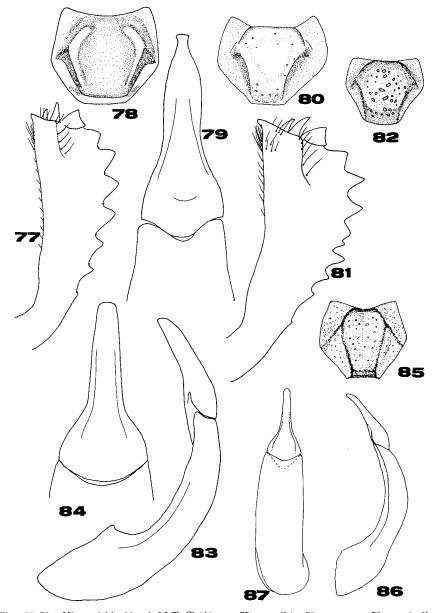
Figs. 58-63: *Uloma fukiensis* Kaszab, ♂; 58: antenna, 59: protibia, 60: left corner of fore body, 61: mentum, 62: genitalia (lateral view), 63: genitalia (apical portion in dorsal view).



Figs. 64-68: *Uloma meifengensis* Masumoto, ♂; 64: antenna, 65: protibia, 66: mentum, 67: genitalia (lateral view), 68: genitalia (apical portion in dorsal view).

Figs. 69-72: *Uloma ichoi* Nakane, &; 69: protibia, 70: mentum, 71: genitalia (lateral view), 72: genitalia (apical portion in dorsal view).

Figs. 73-76: *Uloma sauteri* Kaszab, ♂; 73: protibia, 74: mentum, 75: genitalia (lateral view), 76: genitalia (apical portion in dorsal view).



Figs. 77-79: *Uloma ishigakiensis* M.T. Chûjô,  $\sigma$ ; 77: protibia, 78: mentum, 79: genitalia (apical portion in dorsal view).

Fig. 80 :  $Uloma\ takarai\ M.T.\ Chûjô,\ 3$  ; 80 : mentum.

Figs. 81-84: *Uloma marseuli marseuli* Nakane, ♂; 81: protibia, 82: mentum, 83: genitalia (dorsal view), 84: genitalia (apical portion in dorsal view).

Figs. 85-87:  $Uloma\ marseuli\ fujitai\ Masumoto,\ \sigma$ ; 85: mentum, 86: genitalia (lateral view), 87: genitalia (dorsal view).